



BACKGROUND OF INVENTION

I. Field of the Invention

This invention relates to vehicle. Specifically, it relates brake system, especially wheel cylinder air bleeding work and caliper air bleeding work.

II. Background art

Why we should do air bleeding work, is without air bleeding, if cylinder got air, the vehicle doesn't stop properly and can make accident. So we have to do air bleeding work perfectly. In case of getting air in a cylinder is wheel cylinder change occasion or wheel cylinder piston cup change or vapor lock occur or caliper change and caliper flexible leaking hose change occasion.

Like these occasion we have to do air bleeding work from the air bleeding nipple. So the air bleeding nipple is frequently stuck up occasion or the vapor lock occur, we have to get trouble time occasion or the working room for moving hand for the air bleeding work is very small or can not reach easily, so like these trouble occasion, in order to save effort and time, we use half auto air bleeding cylinder for the more easy way.

Application/Control No. 10/690, 473

Art Unit: 3683

Amdt: July 18, 2006

Reply to an Office communication concerning this application June 19, 2006

Amendment to the Brief Summary of the Invention:

This listing of the brief summary of the invention will be partially eliminated.

Altogether 25 sheets of paper, 6 sheets of drawing

AMENDMENT – Page 3

BRIEF SUMMARY OF THE INVENTION

At the Auto repair shop, if the auto mechanic changes the wheel cylinder because of the wheel cylinder leaking. After change of the wheel cylinder the auto mechanic should do air bleeding work from the wheel cylinder nipple by loosening and tightening the nipple.

- (a) The wheel cylinder nipple when by loosening time one person pushes step on the brake pedal and the other person loosens the wheel cylinder nipple.
- (b) At this time from the wheel cylinder the air and brake oil bursting come out.
- (c) This work is, we can call, "air bleeding work".
- (d) Exact air bleeding work is that one person steps on the brake pedal and repeats a few times.
- (e) And holding step on the brake pedal, it gathers the air around the nipple.
- (f) And the other person loosens the nipple, the air and the brake oil bursting come out.
- (g) And tighten the nipple, if we do like this work a few times, the air bleeding work is being done,
- (h) Like this type of air bleeding is general air bleeding.

BRIEF SUMMARY OF THE INVENTION

This invention makes air bleeding work more easy way, so save efforts and a lot of times.
(original)

In case of jumbo air plane, save two hours and six persons' efforts and working. (cancelled)

If with wheel the helicopter is trying to do the air bleeding work, it saves a lot of troubles and time and work, if we use half auto air bleeding cylinder. If in a case of vapor lock occur in the wheel cylinder, half auto air bleeding cylinder solves the problem easy way. (cancelled)

- (a) In order to do half auto air bleeding, one person watches out of the master cylinder because brake oil should not be exhausted and keep going filled up the master cylinder.
- (b) And the other person select the switch, we can call it push down and select switch, whose wheel cylinder is trying to do the air bleeding work.
- (c) And then the other person pushes step on the brake pedal a few times, it gathers the air, near the air bleeding hole and release the brake pedal.
- (d) And pushes, push down and select switch and then electric magnet is working.
- (e) And so then the electric magnets withdrawal the blocking two keys from the piston side.
- (f) And then pushes step on the brake pedal a few times, at this time keep going on pressing the push down and select switch.

BRIEF SUMMARY OF THE INVENTION

- (g) And then the air and oil bursting come out. Because unlocked piston is working.
- (h) And then release the brake pedal.
- (i) So the big piston is coming down to the end by the spring pressure.
- (j) And then release the push down and select switch, and the big piston is locking by the keys' reactioning spring.
- (k) This is a one time finish air bleeding work and a few times repeat, air bleeding work is accomplished.
- (l) Like these way, we can select the wheel, which wheel we have to do air bleeding and then finish every wheels' air bleeding work.